

ABSTRACT

A signal detector having an excellent measurement capability that enables simple and accurate cause analysis of noise generation is provided. A signal suppression filter (22) that inhibits high-frequency signals contained in power voltage and a signal separation filter (23) that prevents transmission of the high-frequency signals are provided in series on power lines (21A), (21B) connected to a power input terminal (T1), and a common-mode signal detection circuit (25) and a normal-mode signal detection circuit (26) are provided separately from each other. While bi-directionally blocking transmission of a high-frequency signal (noise) between the power supply and the device to be measured by the signal suppression filter (22) and the signal separation filter (23), the common mode signal and the normal mode signal generated in the device to be measured (3) and entering through a power output terminal (T2) are detecting separately. The analysis of the cause of occurrence of a high-frequency signal produced in the device to be measured (3) is facilitated, and proper noise countermeasure may be taken.